



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/573,079

03/23/2006

John Wolsey Cook

36-1970

7001

23117

7590

04/01/2008

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

OVANDO, PABLO R

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,079	<b>Applicant(s)</b> COOK, JOHN WOLSEY	
	<b>Examiner</b> PABLO R. OVANDO	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

Amendment received on January 29, 2008 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1- 6 and 9 - 14** are rejected under 35 U.S.C. 102(b) as being anticipated by Natra et al, European Patent Application 1009156 (hereinafter referenced as Natra).

As to **claim 1**, Natra teaches a system for providing a telephony service between an exchange and a telephone said system comprising:  
an exchange (fig. 1 telephone exchange 38); a telephone (fig. 1 telephone 5a, 5b, 5c);  
an electrical transmission line connecting said exchange and said telephone (fig. 1 element 31b, fig. 1 element 36, fig. 1 element 21); a node inserted in said electrical transmission line, said node defining a first section of said electrical transmission line extending from said exchange to said node, and a second section of said electrical transmission line extending from said node to said telephone (fig. 1 element 10), said exchange, in use, supplying telephony control signals and voiceband signals on to said

Art Unit: 2614

first section (paragraph 6);

a power supply arranged in operation to supply electrical power on to said second section (fig. 1 element 42, paragraph 19 and 22);

a signal converter arranged in operation to convert telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power (paragraph 10, 21);

said node comprising electrical equipment arranged in operation to draw electrical power supplied by said power supply from said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit).

As to **claim 2**, Natra teaches that the signal converter is further arranged in operation to convert modified upstream control signals into telephony control signals (paragraph 11).

As to **claim 3**, Natra teaches that the said node further comprises said signal converter (paragraph 9, note that fig. 1 element 10 converts signals).

As to **claim 4**, Natra teaches a subscriber unit inserted in said second section, said subscriber unit defining a network subsection thereof extending from said node to said subscriber unit, and a subscriber subsection thereof extending from said subscriber unit to said telephone, said subscriber unit comprising a further signal converter arranged in operation to convert said modified control signals into telephony control signals as supplied by said exchange (paragraph 21).

As to **claim 5**, Natra teaches that the further signal converter is further arranged in operation to convert telephony control signals supplied by said telephone into

Art Unit: 2614

modified upstream control signals and wherein said signal converter is further arranged in operation to convert modified upstream control signals into telephony control signals as supplied by said telephone (paragraph 21).

As to **claim 6**, Natra teaches that the subscriber unit further comprises said power supply (paragraph 21).

As to **claim 9**, Natra teaches that the node further comprises a filter arranged in operation to allow said voiceband signals to pass across said node with minimal attenuation but substantially attenuate all other signals (paragraph 10 and 23 teach a band pass filter, wherein certain signals will be attenuated based on the cut-off frequency).

As to **claim 10**, Natra teaches that the subscriber unit further comprises a filter arranged in operation to allow said voiceband signals to pass across said subscriber unit with minimal attenuation but substantially attenuate all other signals (paragraph 10 and 23 teach a band pass filter, wherein certain signals will be attenuated based on the cut-off frequency).

As to **claim 11**, Natra teaches modified control signals have a frequency that is different to the frequency of said voiceband signals (paragraph 10 and 23).

As to **claim 12**, Natra teaches a node in a telecommunications network, said node interconnecting first and second sections of an electrical transmission line, said electrical transmission line connecting an exchange in said first section to a telephone in said second section and arranged in operation to carry telephony control signals and

Art Unit: 2614

voiceband signals supplied on to said first section (fig. 1), said node comprising:

electrical equipment arranged in operation to draw electrical power supplied on to said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit );

a signal converter arranged in operation to convert telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power and modified upstream control signals into telephony control signals (fig. 1 element 10, paragraph 21, 23).

As to **claim 13**, Natra teaches a subscriber unit in a telecommunications network, said subscriber unit interconnecting first and second sections of an electrical transmission line, said electrical transmission line connecting an exchange in said first section to a telephone in said second section and arranged in operation to carry telephony control signals and voiceband signals supplied on to said first section (fig. 1), said subscriber unit comprising:

a power supply arranged in operation to supply electrical power on to said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit);

a signal converter arranged in operation to convert telephony control signals supplied by said telephone into modified upstream control signals having a frequency that is different to the frequency of said electrical power and modified downstream control signals into telephony control signals (fig. 1 element 10, paragraph 21 and 23).

As to **claim 14**, Natra teaches a method of providing a telephony service between an exchange and a telephone, wherein said exchange and said telephone are connected by an electrical transmission line having a node inserted therein, said node defining a first section of said electrical transmission line extending from said exchange to said node, and a second section of said electrical transmission line extending from said node to said telephone (fig. 1), said method comprising the steps:

- (i) supplying telephony control signals and voiceband signals from said exchange on to said first section (paragraph 21);
- (ii) supplying electrical power on to said second section (fig. 1 element 42a, paragraph 19, 22);
- (iii) converting telephony control signals supplied by said exchange into modified downstream control signals having a frequency that is different to the frequency of said electrical power (paragraph 21 and 23);
- (iv) operating electrical equipment in said node to draw electrical power from said second section (fig. 1 element 42a, and paragraph 19 and 22, note that there is an ac voltage and a power supply unit).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2614

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 7- 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Natra.

As to **claims 7- 8**, Natra teaches that the system has a backup battery in case of a power failure. However, Natra does not teach that the system has a bypass unit. Natra teaches that in the prior and in current systems, the power is fed from the exchange (col. 1 lines 24-34). In that configuration, the node would necessarily function in a bypass manner since the voltage or signals would not be altered at the node. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the bypass unit for the purpose of having redundancy in the system. Additionally, the bypass unit functions in the same manner as the discussed prior art.

### ***Response to Arguments***

Applicant's arguments filed January 29, 2008 have been fully considered but they are not persuasive. Applicant asserts on page 11 that the power is not supplied onto cable 21a. However, Natra teaches that unit 10 provides power to the corresponding subscriber line (paragraph 19). Additionally, paragraph 21 teaches that unit 10 provides power to the subscriber via cable 21. Note that the second node is being read as the connection from unit 10 to the subscriber's line 20. Applicant also asserts that no signal conversion to modify the downstream control signals is performed. However, Natra teaches that the exchange sends a signal and once that signal reaches a detection



module 60, the frequency is determined and analyzed if it is for ringing purpose (paragraph 23). When it is determined that it is for ringing purposes, module 50 generates an AC ringing voltage (paragraph 23). Note that the signal sent from the exchange was converted into an AC ringing voltage.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PABLO R. OVANDO whose telephone number is (571)272-9752. The examiner can normally be reached on M-F 7:30 am to 5:00pm, EST, Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pablo R Ovando/  
Examiner, Art Unit 2614

/Ahmad F. MATAR/  
Supervisory Patent Examiner, Art Unit 2614